

U.S. Patent Application Serial No. **10/808,446**
Amendment filed January 27, 2006
Reply to OA dated October 28, 2005

REMARKS

Claims 4-5 and 7-9 are pending in this application.

Claims 1-3 and 6 have been cancelled.

Original claim 4 has been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention. The support for the claim amendment and new claims is as follows:

- Claim 4 is based on Examples 1-3 (superior adhesion strength of dense skin layer in comparison to porous layer); Examples 4-6 (superior water vapor and air permeability of fabric laminated on dense skin layer in comparison to porous layer); p.12, lines 12-18 (fabric laminated on dense skin layer).
- Claim 7 is based on original claim 2.
- Claim 8 is based on original claim 3.
- Claim 9 is based on original claim 3.

The applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated **October 28, 2005**.

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Claims 1-3, and 6 are rejected under 35 USC 102(b) as being anticipated by Reaney (U.S. Patent 5,162,149).

Claims 1-3 and 6 have been cancelled.

Claims 1 and 2 are rejected under 35 USC 102(b) as being anticipated by Abe, et al. (U.S. Patent 5,749,586).

Claims 1 and 2 have been cancelled.

Claims 2 and 6 are rejected under 35 USC 103(a) as being obvious in light of Reaney over Gore (U.S. Patent 3,953,566) and Harris, et al. (U.S. Patent 4,187,590).

Claims 2 and 6 have been cancelled.

Claims 4 and 5 are rejected under 35 USC 103(a) as being obvious in light of Reaney over Bellairs, et al. (U.S. Patent 4,863,788).

Reaney discloses a non-blocking seam tape comprising an asymmetric porous PTFE membrane having a dense skin layer and a continuously foamed porous layer. **Reaney** further discloses that **the porous layer is adjacent to a fabric.** (Reaney, col.3, lines 1-17).

The Examiner concedes that **Reaney** does not disclose specific fabrics.

Bellairs is cited for the disclosure of woven and nonwoven fabrics such as polyester, nylon,

or cotton.

However, contrary to the claimed invention, **Reaney** does not teach an asymmetric PTFE membrane wherein woven or nonwoven **fabric is laminated on a dense skin layer**, and thereby forming an air permeable and waterproof membrane. Unlike the claimed invention, **Reaney** teaches an asymmetric PTFE membrane wherein a **fabric is applied on a porous layer** having pores that are filled with a cured or partially cured adhesive. (**Reaney**, col.3, lines 1-6). In fact, **Reaney teaches away from the present invention**. **Reaney** discloses that an “adhesive penetrates into the surface pores...[of the] expanded porous PTFE layer” and solidifies, in order to provide a surface on which hot melt adhesive can be applied. (**Reaney**, col.3, lines 45-49). Thereafter, fabric is applied to this porous, adhesive-penetrated, hot melt adhesive-applied, PTFE layer. (**Reaney**, Fig.2; col.3, lines 11-17). Accordingly, the invention of **Reaney** requires that the PTFE layer onto which fabric is laminated be porous, in order to provide surface pores into which adhesive can penetrate. **Unlike the present invention, Reaney teaches that a fabric must necessarily be applied on a porous layer of an asymmetric PTFE membrane**. In fact, according to **Reaney**, the PTFE layer that does not come into contact with fabric is the layer densified by heat, forming a dense skin layer. (**Reaney**, col.3, lines 49-56; Fig.2).

Reaney's teachings are in contrast to the present invention where fabric is laminated to a thermally treated dense skin layer of an asymmetric PTFE membrane. **Thermally treated dense skin layer has an adhesion strength that is 5-6 times greater than that of a porous layer**. In

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fact, Examples 1-3 show that the adhesion strength of a dense skin layer is as large as **268.0 to 319 g/cm**, compared to a porous layer which has an adhesion strength of **51.6 g/cm**. (Specification, p.17, Ex.1-3). Furthermore, a material comprising fabric laminated on a dense skin layer of an asymmetric PTFE membrane exhibits increased water vapor and air permeability in comparison to fabric laminated on a porous layer. (Specification, p.17, Ex.4-6). **For these reasons, in the claimed invention, fabric is specifically laminated on a dense skin layer of an asymmetric PTFE membrane.**

Reaney and **Bellairs** fail to render the claimed invention obvious as a whole because the references do not disclose a material for clothing wherein fabric is laminated on a dense skin layer of an asymmetric porous PTFE membrane, as recited in the claims. In fact, **Reaney's** disclosure teaches away from the claimed invention.

It is respectfully requested that the rejection be favorably reconsidered.

In view of the aforementioned amendments and accompanying remarks, claims, as amended, are in condition for allowance, which action, at an early date, is requested.

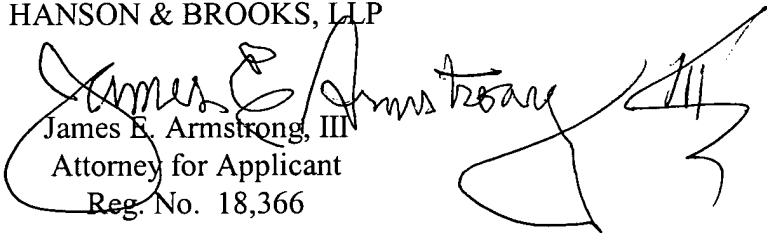
If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosures:

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